



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,152	07/25/2006	Walter Stieglbauer	STIEGLBAUER ET AL 6 PCT	4971
25889	7590	04/21/2009	EXAMINER	
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			DANG, KET D	
		ART UNIT	PAPER NUMBER	
		3742		
		MAIL DATE	DELIVERY MODE	
		04/21/2009	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/587,152	STIEGLBAUER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	KET DANG	4118	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 25 July 2006.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 41-80 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 41-80 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 25 July 2006 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 07/25/2006, 02/20/2007.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_ .

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in PCT/AT 2005/000022 on 27 January 2005.

### ***Claim Objections***

2. Claim 44 is objected to because of the following informalities: In claim 44, "an angle of 1200" is misspelled. Examiner interprets the phrase it as "an angle of 120°". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 41-60 and 62-80 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Regarding claims 41, 60, and 80, the phrase "and/or" renders the claim indefinite per se.
6. Regarding claims 44, 45, 47-49, 62, 64-69 and 80, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).
7. Regarding claims 50, 72 and 75, the phrase "in particular" renders the claim indefinite as for the same reason set forth above.

8. Regarding claims 55 and 75, the phrase “rotationally fast manner” renders the claim indefinite because it is unclear how fast would be considered “fast” manner thereby rendering the scope of the claim(s) unascertainable

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 41, 43, 45-49, 52-54, 56-58, 60-63, 65-69, 72-74, 76-78, and 80, are rejected under 35 U.S.C. 102(b) as being anticipated by Berger (GB 2016984 A).

11. Regarding claim 41, Berger discloses a wire feed device (Abstract) for transporting a welding wire from a wire storage to a point of consumption including at least one element for guiding the welding wire 3 (Fig.1), wherein at least one guiding element including a guide path is provided 5 (Fig. 1) along which several transport elements are displaceably mounted 2 (Fig. 1), wherein furthermore at least one transport element is connected with a drive means 7 (Fig. 1), at least one further transport element is connected with the welding wire in a form-locking manner (Page 1, lines 84-86) (Page 2, lines 100-107), and wherein at least one guiding element is displaceably arranged for adaptation to the diameter of the welding wire (Abstract).

12. Regarding claim 43, 45-49, 52-54, 56-58, and 60, Berger discloses a wire feed device, wherein several guiding elements are provided 5 (Fig.1); wherein the base body together with at least one guiding element is, preferably centrically (Page 1, lines 16-

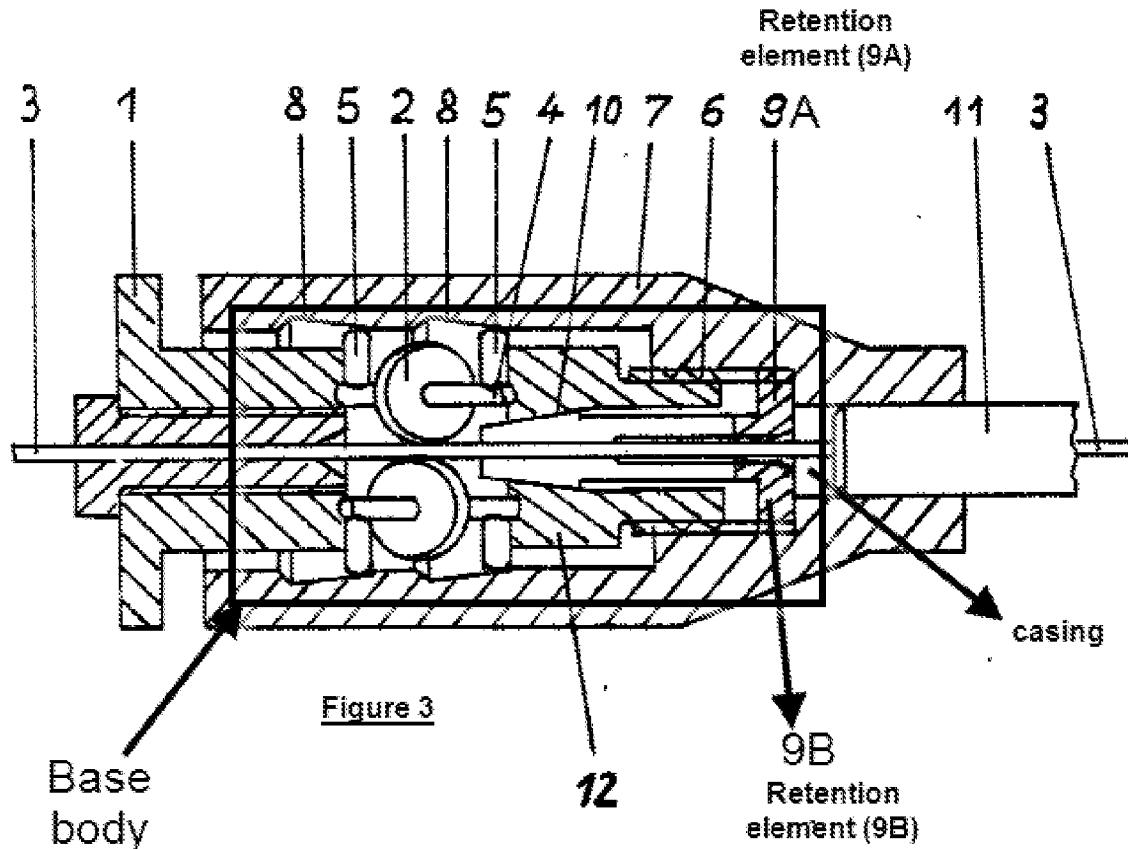
20), arranged in a drive sleeve 7 (Fig. 1); wherein the drive sleeve is formed with an internal thread adapted to the contour of the transport element 2 (Fig.1) and engaged by at least one transport element; wherein the internal thread of the drive sleeve, the base body and the guiding element are preferably conically designed 10 (Fig. 1) (Page 4, lines 28-39); wherein the base body comprises a preferably cylindrical projection (Page 2, lines 10-14), which is mounted in the interior of the drive sleeve; wherein the base body , on its side located opposite the projection, comprises a preferably rectangularly designed positioning flange 1 (Fig. 2); wherein the coupling element is directly connected with a drive, in particular electromotor (Page 4, lines 40-42); wherein the drive is arranged axially to the wire feed device (Page 3, lines 94-100); wherein the drive comprises a hollow shaft 11 (Fig. 11) (Page 4, lines 94-99), which is connected with the coupling element; wherein a pressure element is arranged in the base body so as to be positioned between the positioning flange (Page 2, lines 100-107) and the guiding element and exert a pressure force onto the guiding element (Page 1, lines 79-89); wherein the guiding element comprises a guide groove 8 (Fig. 1), and at least one guide pin is arranged on the base body to engage said guide groove of the guiding element (Page 1, lines 79-84); wherein the transport element is designed in the form of a ball (Page 3, lines 49- 56); and wherein the wire feed device is arranged in a welding apparatus (Page 1, lines 14-15).

13. Regarding claim 61, Berger discloses a method for feeding a welding wire 3 (Fig. 10 from a wire storage to a point of consumption, wherein the welding wire is guided through at least one element 2 (Fig. 1), wherein several transport elements (Abstract)

are guided in at least one guiding element to circulate along a guide path 5 (Fig.1), with at least one transport element 2 (Fig.1) being in operative connection with the welding wire on a side of the guiding element facing the welding wire 3 (Fig. 1), and on at least one further side of the guiding element 5 (Fig. 1, the bottom side), at least one further transport element is displaced by a drive means 7 (Fig. 1), thus causing the further transport elements arranged in the guide path to be moved on by one transport element displaced by the drive means 7 (Fig. 1), and wherein at least one guiding element is displaced for adaptation to the diameter of the welding wire (Abstract).

14. Regarding claims 62-63, 65-69, 72-74, 76-78, and 80, Berger discloses a method for feeding a welding wire, wherein the guiding element 5 (Fig. 1) is displaced in a base body, preferably in the longitudinal direction (Page 3, lines 103-109); wherein several guiding elements (Page 3, line 94-100) are arranged in the base body; wherein the base body, together with the guiding element arranged therein, is preferably centrically (Page 1, lines 16-20) arranged in a drive sleeve forming the drive means 7 (Fig. 1); wherein at least one transport element engages a thread of the drive means, with the contour of the thread being adapted to the contour of the transport element (Page 1, lines 79-84); wherein the thread of the drive sleeve, the base body and the guiding element are preferably conically designed 10 (Fig. 1) (Page 4, lines 28-39); wherein the base body comprises a preferably cylindrical projection (Page 2, lines 10-14), via which the base body is mounted in the interior of the drive sleeve 7 (Fig. 1), preferably via a bearing assembly (Page 4, lines 21-29); wherein the drive sleeve is directly connected with a drive, in particular electromotor (Page 4, lines 40-42); wherein the drive is arranged

axially to the wire feed device (Page 3, lines 94-100); wherein the drive is connected with the coupling element via a hollow shaft 11 (Fig. 11) arranged in the drive (Page 4, lines 94-99), welding wire being fed through hollow shaft (Page 4, lines 40-42); wherein a pressure force is exerted on the guiding element by a pressure element arranged in the base body between the positioning flange (Page 2, lines 100-107) and the guiding element (Page 1, lines 79-89); wherein at least one guide pin arranged on the base body engages a guide groove 8 (Fig. 1) of the guiding element (Page 2, lines 65-71) and the guiding element is displaced via assembly (Page 1, lines 9-11); wherein the transport element is designed in the form of a ball (Page 3, lines 49-56); and wherein the wire feed device (Abstract) is preferably arranged in a welding apparatus (Page 1, lines 14-15).



***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 42, 50-51, 55, 59, 70-71, 75, and 79, are rejected under 35 U.S.C. 103(a) as being unpatentable over Berger (GB 2016984 A).

17. Regarding claims 42, 50-51, 55, 59, 70-71, 75, and 79, Berger discloses the claimed invention, except for at least one guiding element is displaceably arranged in a base body; the positioning flange is connected with a retention element in a rotationally fast manner; wherein the drive sleeve is connected with a coupling element, coupling element being arranged on the opposite side of the retention element; wherein the drive, in particular a casing of the drive, is connected with a further retention element in a rotationally fast manner; wherein the drive sleeve has an outer diameter of between 20 mm and 30 mm. However, Berger teaches wherein at least one guiding element is displaceably arranged in a base body (See “Base body” in figure 3 enclosed above); the positioning flange is connected with a retention element in a rotationally fast manner 9A (See Figure 3 enclosed above); wherein the drive sleeve is connected with a coupling element, coupling element being arranged on the opposite side of the retention element 9B (See Figure 3 enclosed above); wherein the drive, in particular a casing (See Figure 3 for a casing) of the drive, is connected with a further retention element (See Figure 3 for retention elements) in a rotationally fast manner; wherein the drive sleeve has an outer diameter of between 20 mm and 30 mm (Abstract, variable diameter). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Berger’s reference, to include the above features. Berger was not adequately labeling those features on the figures and also his invention is capable of adapting them as well.

18. Claims 44 & 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berger (GB 2016984 A) in view of Sugiyama (GB 2174942 A).

19. Regarding Claims 44 & 64, Berger discloses the claimed invention, except for wherein three guiding elements, which are preferably offset by an angle of 120°, are arranged about the welding wire; and wherein preferably three guiding elements, which are offset by 120.degree., are arranged in the base body. However, Sugiyama teaches wherein three guiding elements 19a/19b/19c (Fig. 2) (Page 1, lines 61-66), which are preferably offset by an angle of 120° (See figure 2 for three guiding elements arrangement is illustrated a 120° apart), are arranged about the welding wire in the base body. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Berger's reference, to include three guiding elements which are preferably offset by an angle of 120°, as suggested and taught by Sugiyama, for the purpose of providing a better device structure of transporting welding wire.

### ***Conclusion***

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yohn (US 3,582,599) discloses internal welding tool. Arnett (US 3,912,900) discloses method for feeding wire for welding. And Bong et al. (US Pub No. 2001/0045420 A1) disclose welding system and method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KET DANG whose telephone number is (571)270-7827. The examiner can normally be reached on Monday - Friday, 7:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoang Tu can be reached on (571)272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K.D.  
Examiner, Art Unit 4118  
/TU B HOANG/  
Supervisory Patent Examiner, Art Unit 3742